

AMENDMENTS TO THE CLAIMS

Following is a listing of all claims in the present application, which listing supersedes all previously presented claims:

1. (Previously Presented) A game system including a game machine and an input device, under which a player plays a game using said input device, wherein

said input device comprises an acceleration sensor for generating an acceleration correlation signal when said player actually swings said input device in a real space, and a transmission unit for transmitting said generated acceleration correlation signal to said game machine; and

said game machine displays a ball on a monitor screen through execution of a game program in which a CPU player controlled by a computer program plays against said player, and further comprises:

a first calculation unit for calculating a predicted return position of said ball returned by said CPU player;

a judgment unit for judging whether a current position of said player is in a ball strikable range by comparing said predicted return position and the current position of said player;

a ball striking position movement unit for automatically moving a ball striking position of said player to be approximated to said predicted return position in which said judgment unit judges that the current position is out of the ball strikable range;

a swing detection unit for detecting whether said input device has been actually swung or not; and

a second calculation unit for calculating an initial speed vector of said ball after received when said swing detection unit has detected a swing in which the position of said ball exists in a ball receivable range that is three-dimensionally defined, from a position of said ball and acceleration of said input device according to said acceleration correlation signal.

2-5. (Canceled).

6. (Previously Presented) A game system including a game machine and two or more input devices, under which two or more players play a game using said input devices, wherein

said input devices each comprise an acceleration sensor for generating an acceleration correlation signal when said player actually swings said input device in a real space, and a transmission unit for transmitting said generated acceleration correlation signal to said game machine;

said game machine runs a game program in which said two or more players play the game and displays said ball on a monitor screen, and further comprises:

a first calculation unit for calculating a predicted return position of a ball returned by an opposite player;

a judgment unit for judging whether a ball striking player is in a ball strikable range by comparing said predicted return position and a current position of said ball striking player;

a ball striking position movement unit for automatically moving a ball striking position for said ball striking player to be approximated to said predicted return position

when said judgment unit judges that the current position is out of the ball strikable range;

a swing detection unit for detecting whether said input device has been actually swung or not; and

a second calculation unit for calculating an initial speed vector of said ball after received when said swing detection unit has detected a swing in which the position of said ball exists in a ball receivable range that is three-dimensionally defined, from a position of said ball and acceleration of said input device according to said acceleration correlation signal.

7. (Previously Presented) A game system according to claim 1 or 6, wherein said input device further includes an operating switch;
said transmission unit transmits an operation signal from said operating switch together with said acceleration correlation signal to said game machine; and
said game machine further comprises a position movement unit for moving said ball striking position on said monitor screen from forward position to backward position or from backward position to forward position, in response to said operation signal transmitted from said input device.

8. (Previously Presented) A game system according to claim 1 or 6, wherein said transmission unit of said input device includes an infrared light-emitting element for transmitting said acceleration correlation signal by means of infrared light.

9. (Previously Presented) A game system according to claim 8, wherein

said transmission unit digital-modulates and transmits said acceleration correlation signal to said game machine; and

said game machine digital-demodulates said acceleration correlation signal transmitted by said transmission unit.

10. (New) A method for controlling a game displayed on a game machine and played by a player using an input device, comprising:

generating an acceleration correlation signal when said player actually swings said input device in a real space;

transmitting said generated acceleration correlation signal to said game machine;

displaying, by the game machine, a ball on a monitor screen through execution of a game program in which a CPU player controlled by a computer program plays against said player:

calculating a predicted return position of said ball returned by said CPU player;

judging whether a current position of said player is in a ball strikable range by comparing said predicted return position and the current position of said player;

automatically moving a ball striking position of said player to be approximated to said predicted return position in which said judgment unit judges that the current position is out of the ball strikable range;

detecting whether said input device has been actually swung or not; and

calculating an initial speed vector of said ball after received when a swing is detected in which the position of said ball exists in a ball receivable range that is three-

dimensionally defined, from a position of said ball and acceleration of said input device according to said acceleration correlation signal.

11. (New) A method according to claim 10, wherein
said input device includes an operating switch and a transmitting unit, the transmitting unit transmits an operation signal from said operating switch together with said acceleration correlation signal to said game machine, and
wherein the method further comprises moving said ball striking position on said monitor screen from forward position to backward position or from backward position to forward position, in response to said operation signal transmitted from said input device.

12. (New) A method according to claim 10, wherein said input device includes transmitting unit having an infrared light-emitting element for transmitting said acceleration correlation signal by means of infrared light.

13. (New) A method according to claim 12, wherein
said transmission unit digital-modulates and transmits said acceleration correlation signal to said game machine; and
said game machine digital-demodulates said acceleration correlation signal transmitted by said transmission unit.

14. (New) A method for controlling a game displayed on a game machine and is played by two or more players using two or more input devices, comprising:
generating acceleration correlation signals when the two or more players actually swing said two or more input devices in a real space,

transmitting said generated acceleration correlation signals to said game machine, wherein said game machine runs a game program in which said two or more players play the game and displays a ball on a monitor screen;

calculating a predicted return position of a ball returned by an opposite player;

judging whether a ball striking player is in a ball strikable range by comparing said predicted return position and a current position of said ball striking player;

automatically moving a ball striking position for said ball striking player to be approximated to said predicted return position when said judgment unit judges that the current position is out of the ball strikable range;

detecting whether said two or more input devices have been actually swung or not; and

calculating an initial speed vector of said ball after received when a swing is detected in which the position of said ball exists in a ball receivable range that is three-dimensionally defined, from a position of said ball and acceleration of said input device according to said acceleration correlation signal.

15. (New) A method according to claim 14, wherein

each of said input devices includes an operating switch and a transmission unit; said transmitting unit transmits an operation signal from said operating switch together with said acceleration correlation signal to said game machine, and

wherein the method further comprises a position movement unit for moving said ball striking position on said monitor screen from forward position to backward position

or from backward position to forward position, in response to said operation signal transmitted from said input device.

16. (New) A method according to claim 14, wherein each of said input devices includes a transmission unit having an infrared light-emitting element for transmitting said acceleration correlation signal by means of infrared light.

17. (New) A method according to claim 16, wherein
said transmission unit digital-modulates and transmits said acceleration correlation signal to said game machine; and
said game machine digital-demodulates said acceleration correlation signal transmitted by said transmission unit.